

What is claimed is:

1. A reusable fluid dispenser comprising:

a) subsystem B having a fluid reservoir adapted for containing a fluid, the fluid reservoir comprising:

(i) a fluid outlet adapted for dispensing fluid contained in the fluid reservoir;

(ii) a separator movably positioned in a dispensing position to bias fluid contained in the fluid reservoir out of the fluid outlet, to dispense the fluid through the fluid outlet;

(iii) a fluid inlet positioned for recharging the fluid reservoir with the fluid while biasing the separator into the dispensing position; and

b) subsystem A having a power head assembly removably attached to the fluid reservoir comprising a gas generator in fluid communication with the separator, wherein gas generated by the gas generator is communicable to the separator to move the separator to dispense the fluid.

2. The apparatus of claim 1, wherein said fluid inlet comprises a one-way fluid fitting.

3. The apparatus of claim 1, wherein said separator is capable of preventing gas from moving into said reservoir.

4. The apparatus of claim 1, wherein a union seal couples subsystem A to subsystem B so as to limit escape of the gas generated by the gas generator in communication with the separator, to form a sealed union of subsystem A with subsystem B.

5. The apparatus of claim 1, wherein said gas generating means is capable of generating gas by a gas generating reaction selected from the group consisting of a spontaneous electrochemical reaction, a non-spontaneous electrochemical reaction, and a spontaneous thermochemical reaction.

6. The apparatus of claim 5, wherein said gas generating reaction is spontaneous

7. The apparatus of claim 5, wherein the rate of said gas generating reaction is adjustable.

8. The apparatus of claim 1, wherein said fluid is a lubricant.

9. The apparatus of claim 8, wherein said lubricant is a bearing grease.

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10. The apparatus of claim 8 in which the lubricant is an oil.

11. The apparatus of claim 1, wherein said separator is selected from the group consisting of a bellows, a bladder, a piston, bellows and piston, and bladder and piston.

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12. The apparatus of claim 1, wherein said separator comprises a bellows and piston.

13. The apparatus of claim 1, wherein said fluid is replaceable.

15 14. The apparatus of claim 1, wherein said power head assembly is replaceable.

15. The apparatus of claim 1, wherein said apparatus has replaceable components, selected from the group consisting of:

i) a power head comprising:

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a. a switchboard, a battery, a non-spontaneous electrochemical cell and a switchcap or

b. a switchboard, a spontaneous electrochemical cell and a switchcap, or

c. a reactive (thermo-chemical) solid element, a reactive liquid and means to bring the solid element and the reactive fluid into contact.

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ii) a cylinder or a lubricant reservoir;

iii) a bellows comprising a mounting base;

iv) a bladder comprising a mounting base;

iv) a piston;

v) a locking ring; and,

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vi) the fluid.

vii). a union seal for coupling Subsystem A to Subsystem B so as to prevent the escape of gas from the union.